

# MMWR

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Public Health Dispatch

## Fibrosing Skin Condition Among Patients with Renal Disease — United States and Europe, 1997–2002

During May 1997-November 2000, eight (3%) of 265 kidney transplant recipients at a hospital in California developed an unusual skin condition posttransplant (Figure 1). On clinical examination, the patients had fibrotic skin lesions histologically resembling scleromyxedema on their distal extremities and trunk, resulting in severe contractions and limited mobility. However, the usual IgG lambda paraprotein associated with scleromyxedema was not observed in these patients. Personnel in the dermatopathology section at the University of California, San Francisco, reviewed the biopsies and concluded that this skin disorder had not been described previously. As a result, health-care providers at the hospital where the index patient was treated asked the California Department of Health Services (CDHS) and CDC to assist in the investigation. This report summarizes preliminary findings from the investigation.

FIGURE 1. Arm of patient with fibrosing skin condition



Photo/courtesy Lippincott Williams & Wilkins

A case was defined as large areas of hardened skin with slightly raised plaques or papules, with or without pigment alteration, in a patient with a skin biopsy indicating increased dermal fibroblasts and mucin and an abnormal dermal collagen bundle pattern. Additional patients were identified by responses to a publication describing the condition (1), by colleague referral, and by contacting members of the American Society of Dermatopathology, who were asked to alert other clinicians about the condition and to refer potential patients to CDHS. As of January 2002, 49 patients have been identified throughout the United States and Europe. Although having renal disease is not a part of the case definition, all patients have had underlying renal disease; approximately half have had renal transplantation. No consistently effective treatment exists; however, several patients have improved.

To identify risk factors for this condition, in February 2001, CDHS conducted a case-control study among the eight case-patients at the index hospital, all of whom had renal disease and had undergone renal transplantation. Three controls were selected per case, matched by closest renal transplant date. Medical records for case- and control-patients were reviewed for demographic characteristics, procedures, infections, laboratory values, measures of renal function, and medication exposures. Case- and control-patients were similar

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### Notifiable Disease Morbidity and 122 Cities Mortality Data

Carol M. Knowles Deborah A. Adams Patsy A. Hall Mechele A. Hester Felicia J. Connor Pearl C. Sharp demographically, in the type and duration of immunosuppressive therapy or type of pretransplant dialysis, kidney transplant type, invasive procedures (e.g., surgical or diagnostic), or posttransplant infections.

Case-patients were more likely than controls to have poor renal function posttransplantation, which included requiring hemodialysis and receiving medications associated with severe disease. Because this investigation involved a small number of patients who had undergone renal transplantation, the case-control study should be expanded to include other reported cases, including cases among nontransplant patients.

Clinical and histopathologic photographs of this condition are available at http://www.pathmax.com/dermweb. Information about patients with this condition can be reported to mgoveia@dhs.ca.gov until July 2002.

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 Cowper SE, Robin HS, Steinberg SM, Su LD, Gupta S, LeBoit PE. Scleromyxoedema-like cutaneous diseases in renal-dialysis patients. Lancet 2000;356:1000-1.

# Respiratory Syncytial Virus Activity — United States, 2000–01 Season

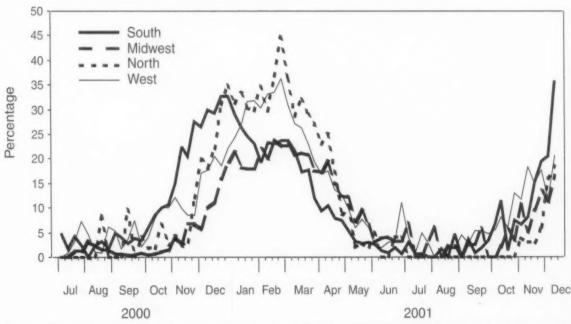
Respiratory syncytial virus (RSV) has a worldwide distribution and can cause serious lower respiratory tract illness (LRTI). RSV is most commonly considered a pathogen among infants and young children; however, it can cause serious LRTI throughout life, especially among those with compromised respiratory, cardiac, or immune systems and the elderly (1-3). In temperate climates, RSV infections occur primarily during annual outbreaks, which peak during winter months (4). In the United States, RSV activity is monitored by the National Respiratory and Enteric Virus Surveillance System (NREVSS), a laboratory-based surveillance system. This report summarizes trends in RSV activity reported to NREVSS during July 2000-June 2001 and presents preliminary surveillance data from the weeks ending July 7 through December 8, 2001, indicating the onset of the 2001-02 RSV season. Health-care providers should consider RSV in the differential diagnosis of lower respiratory tract disease in persons of all ages, use isolation procedures to prevent nosocomial transmission, and consider use of immune globulin or monoclonal antibody prophylaxis in premature infants or infants and children with chronic lung disease (5).

A total of 81 clinical and public health laboratories in 47 states and the District of Columbia report weekly to CDC the number of specimens tested and the number positive for several respiratory and enteric viruses by antigen detection and virus isolation methods. During July 2000–June 2001, 64 laboratories representing 41 states reported 138,984 tests for RSV; 18,605 (13.4%) were positive. Widespread\* RSV activity began the week of November 11, 2000, and

continued for 24 weeks until April 21, 2001. Activity peaked in late December in the southern region of the United States, and in late February in all other regions<sup>†</sup> (Figure 1).

State-specific RSV season onset and conclusion dates varied widely, with a range of outbreak onsets during August 26–January 20, and a range of conclusions during January 29–May 26. Regional RSV outbreaks occurred earliest in the South (23 sites reporting; median weeks of onset and conclusion: October 21 and May 19, respectively), later in the Northeast (six sites; November 25 and May 5), and latest in the Midwest (20 sites; December 9 and May 26) and West (14 sites; October 21 and May 26).

FIGURE 1. Percentage of specimens testing positive for respiratory syncytial virus, by region\* and week of report — United States, July 2000–December 2001



<sup>\*</sup> Northeast=Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; Midwest=Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; South=Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia; West=Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

Widespread RSV activity is defined by NREVSS as the first of 2 consecutive weeks when 50% of participating laboratories report RSV detections or isolations, and when the mean percentage of specimens positive by antigen detection is >10%.

Northeast=Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; Midwest=Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; South=Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia; West=Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

Although 94% of RSV detections were reported for the week ending October 30 through the week ending March 25, sporadic detections were reported throughout the year. During July–August 2001, laboratories in Arizona, California, Florida, Hawaii, Nevada, Ohio, Texas, Virginia, Washington, and West Virginia reported sporadic isolates of RSV.

For the current reporting period (July 7 through December 13, 2001), 55 laboratories in 37 states reported results of testing for RSV. Since November 3, 2001, 25 participating laboratories have reported RSV (Figure 1).

Reported by: National Respiratory and Enteric Virus Surveillance System collaborating laboratories. A LaMonte, MPH, D Shay, MD, L Anderson, MD, Respiratory and Enteric Viruses Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases, CDC.

Editorial Note: For the July 2000–June 2001 surveillance period, the number of specimens that tested positive for RSV, median months of onset activity, and regional trends were similar to trends reported during previous years. The duration of the 2000–2001 RSV season also was consistent with that of previous years, including the characteristic earlier onset of RSV outbreaks reported by southern laboratories.

RSV causes bronchiolitis and pneumonia in infants and young children; RSV causes an estimated 31 bronchiolitis associated hospitalizations per 1,000 children aged <1 year per year (6). The rate of RSV-associated hospitalizations is higher in certain populations, such as American Indian/Alaska Native children receiving care through the Indian Health Service (62 per 1,000 children aged <1 per year) (7).

Because RSV infection confers only partial protection from subsequent infection, reinfections occur throughout life (I-3). As a result, health-care providers should consider RSV as a cause of acute respiratory disease in all age groups during community outbreaks. Persons with underlying cardiac or pulmonary disease, compromised immune systems, and the elderly are at increased risk for serious complications of RSV infection, including LRTI and death. The disease burden of RSV infections might be  $\geq 50\%$  of that associated with influenza (8). RSV infection among recipients of bone marrow transplants has been associated with mortality rates > 50% (4).

Rapid diagnostic techniques for clinicians vary in sensitivity and specificity. Some assays are sensitive for diagnosis in infants and young children but not in older children and adults. PCR-based assays are the most sensitive. No effective treatment for RSV-associated LRTI exists. Ribavirin initially was reported to be an effective treatment; however, subsequent trials could not substantiate a benefit from this

therapy (9). NREVSS data can alert public health officials and health-care providers to the timing of seasonal RSV activity. Although no RSV vaccine is available, RSV immune globulin intravenous and a humanized murine anti-RSV monoclonal antibody are available as prophylaxis for some high-risk infants and young children (e.g., those born prematurely or with chronic lung disease) to prevent serious RSV disease (5). Contact isolation procedures are recommended for prevention and control of nosocomial transmission of RSV (10).

The findings in this report are subject to at least three limitations. First, laboratory data indicate when RSV is circulating in a community; however, the correlation of these data to disease burden in the population is uncertain. Second, few laboratories represent some regions. Finally, diagnostic methods are not standardized among contributing laboratories, and the sensitivity and specificity of these methods probably vary among reporting laboratories.

Additional information and updated data on RSV trends are available at http://www.cdc.gov/ncidod/dvrd/revb/nrevss/index.htm.

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## Lyme Disease — United States, 2000

Lyme disease (LD) is caused by the tickborne spirochete *Borrelia burgdorferi* sensu lato and is the most common vectorborne disease in the United States. CDC initiated LD surveillance in 1982, and the Council of State and Territorial Epidemiologists designated it a nationally notifiable disease in 1991. This report summarizes the 17,730 cases of LD reported to CDC during 2000, which indicates that more LD cases were reported in 2000 than in any previous reporting year and that the reported incidence of LD is greatest in the northeastern, mid-Atlantic, and north-central regions of the United States. LD can be prevented by reducing tick populations, avoiding tick-infested habitats, using repellents, promptly removing attached ticks, and vaccination.

For surveillance purposes, LD is defined as the presence of a physician-diagnosed erythema migrans (EM) rash  $\geq 5$  cm in diameter or at least one manifestation of musculoskeletal, neurologic, or cardiovascular disease with laboratory confirmation of *B. burgdorferi* infection (1). Incidence was calculated using 2000 population data from the U.S. Census Bureau.

During 2000, a total of 17,730 LD cases (incidence\*: 6.3 cases) were reported from 44 states and the District of Columbia, an 8% increase over 1999 (16,273 cases) and a 5% increase over 1998 (16,801 cases) (Figure 1). As in previous years, most cases were reported from the northeastern, mid-Atlantic, and north-central regions (Table 1). State incidence was higher than the national incidence in Connecticut (110.8), Rhode Island (64.4), New Jersey (29.2), New York (22.8), Delaware (21.3), Pennsylvania (19.1), Massachusetts (18.2), Maryland (13.0), Wisconsin (11.8), Minnesota (9.5),

accounted for 16,877 (95%) of nationally reported cases. During 1999–2000, 24 states and the District of Columbia reported increases in the number of cases, 19 reported decreases, and seven reported no change. In 2000, no cases were reported in six states (Colorado, Georgia, Hawaii, Montana, New Mexico, and South Dakota).

Based on data for 17,570 (99%) LD cases, 723 (23%) of

New Hampshire (6.8), and Vermont (6.6); these 12 states

Based on data for 17,570 (99%) LD cases, 723 (23%) of 3,143 U.S. counties reported at least one case; approximately 90% of the cases were reported from 124 counties (Figure 2). Reported incidence was >100 cases in 24 counties in Connecticut, Maryland, Massachusetts, New Jersey, New York, Pennsylvania, Rhode Island, and Wisconsin; the highest incidence (943) was reported in Columbia County, New York.

Among 17,551 LD patients with age reported, distribution was bimodal and the median age was 39 years (range: <1–98 years). The highest reported incidence occurred among children aged 5–9 years (9.3) and adults aged 50–59 years (8.2). Among 17,663 patients with sex reported, 9,472 (53.6%) were males, who had a higher incidence compared with females in all age groups. Among 12,977 (73.2%) patients with month of illness onset reported, 7,427 (57.2%) occurred during June (27.3%) and July (29.9%); <5.8% occurred during January, February, and December 2000.

Reported by: State and District of Columbia health depts. S Marshall, MPH, E Hayes, MD, D Dennis, MD, Div of Vector-borne Infectious Diseases, National Center for Infectious Diseases, CDC.

Editorial Note: During 1991–2000, the reported incidence of LD nearly doubled. Most cases continued to occur in northeastern, mid-Atlantic, and north-central states (2,3), and the largest proportion of cases continued to be reported among persons aged 5–9 years and 50–59 years, possibly as a result of greater exposure than other groups to infected ticks, less frequent use of personal protective measures, differential use of health-care services, and/or reporting bias. The large number of reported LD cases during June and July reflects the seasonal peak of host-seeking activities of infective nymphal-stage vector ticks during May and June in areas where LD is endemic (4).

The findings in this report are subject to at least three limitations. First, because LD is reported through passive surveillance, LD is underreported, and the distribution and demographics of reported cases could be biased. Second, LD is underreported in areas where disease is endemic and might be overreported in areas where disease is nonendemic. Third, not all LD patients present with typical manifestations; other conditions might be confused with LD and laboratory testing might be inaccurate.

\*Per 100,000 population.

FIGURE 1. Number of cases of Lyme disease, by year — United States. 1982–2000

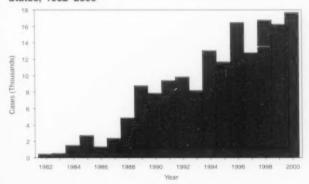


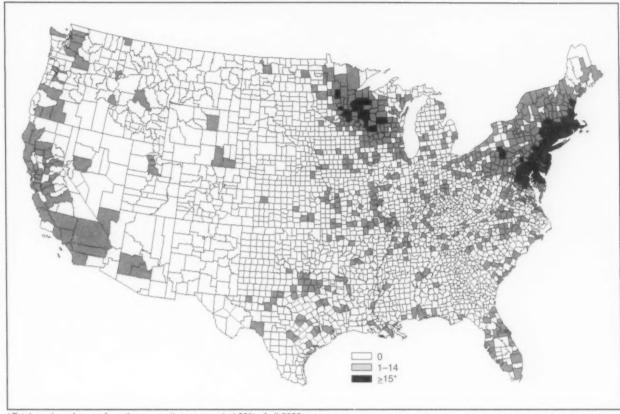
TABLE 1. Number of cases of Lyme disease, by state — 1991–2000, and nationwide incidence\*, 2000† — United States

State	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total	2000 Incidence
	13	10	4	6	12	9	11	24	20	6	115	0.1
labama	0	0	0	0	0	0	2	1	0	2	5	0.3
laska	1	0	0	0	1	0	4	1	3	2	12	0.0
krizona	31	20	8	15	11	27	27	8	7	7	161	0.3
Arkansas	265	231	134	68	84	64	154	135	139	96	1,370	0.3
California		0	0	1	0	0	0	0	3	0	5	0.0
Colorado	1,192	1,760	1.350	2,030	1,548	3,104	2,297	3,434	3.215	3,773	23.703	110.8
Connecticut		219	143	106	56	173	109	77	167	167	1,290	21.3
Delaware	73	3	2	9	3	3	10	8	6	11	60	1.9
District of Columb		24	30	28	17	55	56	71	59	54	429	0.3
Florida	35	48	44	127	14	1	9	5	0	0	273	0.0
Georgia	25			0	0	1	0	0	0	0	4	0.0
Hawaii	0	2	1	3	0	2	4	7	3	4	29	0.3
daho	2	2	2		18	10	13	14	17	35	242	0.3
Ilinois	51	41	19	24			33	39	21	23	256	0.4
ndiana	16	22	32	19	19	32		27	24	34	208	1.2
owa	22	33	8	17	16	19	8		-	17	220	0.6
Kansas	22	18	54	17	23	36	4	13	16	13	233	0.8
Kentucky	44	28	16	24	16	26	20	27	19			0.3
Louisiana	6	7	3	4	9	9	13	15	9	8	83	5.6
Maine	15	16	18	33	45	63	34	78	41	71	414	
Maryland	282	183	180	341	454	447	494	659	899	688	4,627	13.0
Massachusetts	265	223	148	247	189	321	291	699	787	1,158	4,328	18.2
Michigan	46	35	23	33	5	28	27	17	11	23	248	0.2
Minnesota	84	197	141	208	208	251	256	261	283	465	2,354	9.5
Mississippi	8	0	0	0	17	24	27	17	4	3	100	0.1
Missouri	207	150	108	102	53	52	28	12	72	47	831	0.8
Montana	0	0	0	0	0	0	0	0	0	0	0	0.0
Nebraska	25	22	6	3	6	5	2	4	11	5	89	0.3
Nevada	5	1	5	1	6	2	2	6	2	4	34	0.2
New Hampshire	38	44	15	30	28	47	39	45	27	84	397	6.8
New Jersey	915	688	786	1,533	1,703	2,190	2,041	1,911	1,719	2,459	15,945	29.2
New Mexico	3	2	2	5	1	1	1	4	1	0	20	0.0
New York	3.944	3.448	2.818	5,200	4.438	5,301	3,327	4,640	4,402	4,329	41,847	22.8
North Carolina	73	67	86	77	84	66	34	63	74	47	671	0.6
North Dakota	2	1	2	0	0	2	0	0	1	2	10	0.3
Ohio	112	32	30	45	30	32	40	47	47	61	476	0.5
Oklahoma	29	27	19	99	63	42	45	13	8	1	346	0.0
Oregon	5	13	8	6	20	19	20	21	15	13	140	0.4
Pennsylvania	718	1,173	1.085	1,438	1,562	2.814	2.188	2.760	2.781	2,343	18.862	19.1
Rhode Island	142	275	272	471	345	534	442	789	546	675	4,491	64.4
South Carolina	10	2	9	7	17	9	3	8	6	25	96	0,6
South Dakota	1	1	0	Ó	0	0	1	0	0	0	3	0.0
	35	31	20	13	28	24	45	47	59	28	330	0.5
Tennessee				56	77	97	60	32	72	77	689	0.4
Texas	57	113	48		1	1	1	0	2	3	21	0.1
Utah	2	6	2	3				11	26	40	164	6.6
Vermont	7	9	12	16	9	26	8		122	149	1.023	2.1
Virginia	151	123	95	131	55	57	67	73	14		103	0.2
Washington	7	14	9	4	10	18	11	7		9		
West Virginia	43	14	50	29	26	12	10	13	20	35	252	1.9
Wisconsin	424	525	401	409	369	396	480	657	490	631	4,782	11.8
Wyoming	11	5	9	5	4	3	3	1	3	3	47	0.6
TOTAL	9.470	9,908	8,257	13,043	11,700	16,455	12,801	16,801	16,273	17,730	132,438	6.3

Per 100,000 population. In 1991, the Council of State and Territorial Epidemiologists designated Lyme disease a nationally notifiable disease.

LD can be prevented by reducing tick populations, avoiding tick-infested areas, using repellents, promptly removing attached ticks, and vaccination. Booster doses may be required, but the optimal schedule for this has not been determined. A vaccine was licensed in 1998 that is 76% effective in preventing LD among recipients of 3 doses (5). New strategies for reducing tick vectors of LD include applying acaricides to the principal animal hosts of Ixodes scapularis ticks (i.e., a device for killing ticks on white-tailed deer and a bait box for killing ticks on rodents) (6, CDC, unpublished data, 2001). In 2001, community-based LD prevention projects were initiated in Connecticut, Massachusetts, New Jersey, and New York. Through the application of integrated prevention strategies in community-based programs, CDC and state health departments hope to achieve the 2010 national health objective of reducing the incidence of LD to 9.7 in states where LD is endemic (objective 14-8).

FIGURE 2. Number of cases of Lyme disease, by county - United States, 2000



\* Total number of cases from these counties represented 90% of all 2000 cases.

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#### Notice to Readers

## Recommended Childhood Immunization Schedule — United States, 2002

Each year, CDC's Advisory Committee on Immunization Practices (ACIP) reviews the recommended childhood immunization schedule to ensure that it is current with changes in manufacturers' vaccine formulations, has revised recommendations for the use of licensed vaccines, and has recommendations for newly licensed vaccines. This report presents the recommended childhood immunization schedule for 2002, which has remained the same in content since January 2001 (1) but has a redesigned format (Figure 1).

FIGURE 1. Recommended childhood immunization schedule\* — United States, 2002

	Ran	ge of reco	mmended a	ges		Catch-up	vaccinatio	n ////		readolesce	nt assessr	nent
Vaccine	Birth	1 mo	2 mos	4 mos	6 mos	12 mos	15 mos	18 mos	24 mos	4–6 yrs	11-12 yrs	13–18 yrs
Managara Di	Hep B #1	only if moth	er HBsAg (- )			,			011111	Hen B	series	/////
Hepatitis B'			Hep B #2			Нер	B #3			, nop 5	Series .	7/////
Diphtheria, Tetanus, Pertussis <sup>1</sup>			DTaP	DTaP	DTaP		D	ГаР		DTaP	Td	
Haemophilus influenzae Type b°			Hib	Hib	Hib	Н	lib					
Inactivated Polio**			IPV	IPV		11	PV			IPV		
Measles, Mumps, Rubella						MM	R #1			MMR #2	MM	R #2 //
Varicella <sup>65</sup>							Varicella			/// Vari	cella ///	
Pneumococcal <sup>17</sup>			PCV	PCV	PCV	Р	CV	1	// PC	V P	PV	
Hepatitis A***	nes below this	line are fo	r selected po	opulations						Hepatitis	A series	
Influenza <sup>†††</sup>								Influen	za (yearly)			

- \* Indicates the recommended ages for routine administration of currently licensed childhood vaccines, as of December 1, 2001, for children through age 18 years. Any dose not given at the recommended age should be given at any subsequent visit when indicated and feasible. 

  Indicates age groups that warrant special effort to administer those vaccines not given previously. Additional vaccines may be licensed and recommended during the year. Licensed combination vaccines may be used whenever any components of the combination are indicated and the vaccine's other components are not contraindicated. Providers should consult the manufacturers' package inserts for detailed recommendations.
- Hepatitis B vaccine (Hep B). All infants should receive the first dose of hepatitis B vaccine soon after birth and before hospital discharge: the first dose also may be given by age 2 months if the infant's mother is HBsAg-negative. Only monovalent hepatitis B vaccine can be used for the birth dose. Monovalent or combination vaccine containing Hep B may be used to complete the series; 4 doses of vaccine may be administered if combination vaccine is used. The second dose should be given at least 4 weeks after the first dose except for Hib-containing vaccine, which cannot be administered before age 6 weeks. The third dose should be given at least 16 weeks after the first dose and at least 8 weeks after the second dose. The last dose in the vaccination series (third or fourth dose) should not be administered before age 6 months. Infants born to HBsAg-positive mothers should receive hepatitis B vaccine and 0.5 mL hepatitis B immune globulin (HBIG) within 12 hours of birth at separate sites. The second dose is recommended at age 1–2 months and the vaccination series should be completed (third or fourth dose) at age 6 months. Infants born to mothers whose HBsAg status is unknown should receive the first dose of the hepatitis B vaccine series within 12 hours of birth. Maternal blood should be drawn at the time of delivery to determine the mother's HBsAg status; if the HBsAg test is positive, the infant should receive HBIG as soon as possible (no later than age 1 week).
- Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP). The fourth dose of DTaP may be administered as early as age 12 months provided that 6 months have elapsed since the third dose and the child is unlikely to return at age 15–18 months. Tetanus and diphtheria toxoids (Td) is recommended at age 11–12 years if at least 5 years have elapsed since the last dose of tetanus and diphtheria toxoid-containing vaccine. Subsequent routine Td boosters are recommended every 10 years.
- 1 Haemophilus influenzae type b (Hib) conjugate vaccine. Three Hib conjugate vaccines are licensed for infant use. If PRP-OMP (PedvaxHIB or ComVax [Merck]) is administered at age 2 and 4 months, a dose at age 6 months is not required. DTaP/Hib combination products should not be used for primary immunization in infants at age 2, 4 or 6 months but can be used as boosters following any Hib vaccine.
- \*\* Inactivated poliovirus vaccine (IPV). An all-IPV schedule is recommended for routine childhood poliovirus vaccination in the United States. All children should receive 4 doses of IPV at age 2, 4, and 6–18 months, and 4–6 years.
- tt Measles, mumps, and rubella vaccine (MMR). The second dose of MMR is recommended routinely at age 4–6 years but may be administered during any visit provided at least 4 weeks have elapsed since the first dose and that both doses are administered beginning at or after age 12 months. Those who have not previously received the second dose should complete the schedule by the visit at age 11–12 years.
- § Varicella vaccine. Varicella vaccine is recommended at any visit, at or after age 12 months for susceptible children (i.e., those who lack a reliable history of chickenpox). Susceptible persons aged ≥13 years should receive 2 doses given at least 4 weeks apart.
- M Pneumococcal vaccine. The heptavalent pneumococcal conjugate vaccine (PCV) is recommended for all children aged 2–23 months and for certain children aged 24–59 months. Pneumococcal polysaccharide vaccine (PPV) is recommended in addition to PCV for certain high-risk groups. See MMWR 2000;49(No. RR-9):1–37.
- \*\*\* Hepatitis A vaccine. Hepatitis A vaccine is recommended for use in selected states and regions, and for certain high-risk groups. Consult local public health authority and MMWR 1999;48(No. RR-12):1–37.
- 1111 Influenza vaccine. Influenza vaccine is recommended annually for children aged ≥6 months with certain risk factors (including but not limited to asthma, cardiac disease, sickle cell disease, HIV, and diabetes; see MMWR 2001;50[No. RR-4]:1-44), and can be administered to all others wishing to obtain immunity. Children aged ≤12 years should receive vaccine in a dosage appropriate for their age (0.25 mL if 6-35 months or 0.5 mL if ≥3 years). Children aged ≤8 years who are receiving influenza vaccine for the first time should receive 2 doses separated by at least 4 weeks.

Additional information about vaccines, vaccine supply, and contraindications for immunization is available at http://www.cdc.gov/nip or at the National Immunization hotline, 800-232-2522 (English), or 800-232-0233 (Spanish). Copies of the schedule can be obtained at http://www.cdc.gov/nip/recs/child-schedule.htm. Approved by the Advisory Committee on Immunization Practices (http://www.cdc.gov/nip/acip), the American Academy of Pediatrics (http://www.aap.org), and the American Academy of Family Physicians (http://www.aafp.org).

The format of the 2002 schedule is based on a design developed by the Minnesota Department of Health immunization program; the recommendations and format have been approved by ACIP, the American Academy of Family Physicians, and the American Academy of Pediatrics. The new design highlights the importance of catch-up vaccination, the preadolescent visit, the preference for administering the first dose of the hepatitis B vaccine series at birth, and three vaccines for selected at-risk groups. The importance of assessing whether children aged 24 months—18 years require any catch-up vaccination is emphasized by the use of hatched bars. The schedule also underscores the visit at age 11–12 years when immunization status should be reviewed and all necessary vaccines administered.

## **Hepatitis B Vaccine**

The schedule indicates a preference for administering the first dose of hepatitis B vaccine to all newborns soon after birth and before hospital discharge. Administering the first dose of hepatitis B vaccine soon after birth should minimize the risk for infection because of errors in maternal hepatitis B surface antigen (HBsAg) testing or reporting, or from exposure to persons with chronic hepatitis B virus (HBV) infection in the household, and can increase the likelihood of completing the vaccine series. Only monovalent hepatitis B vaccine can be used for the birth dose. Either monovalent or combination vaccine can be used to complete the series. Four doses of hepatitis B vaccine, including the birth dose, may be administered if a combination vaccine is used to complete the series. In addition to receiving hepatitis B immune globulin (HBIG) and the hepatitis B vaccine series, infants born to HBsAg-positive mothers should be tested for HBsAg and antibody to HBsAg (anti-HBs) at age 9-15 months to identify those with chronic HBV infection or those who may require revaccination (2).

# **Vaccines for Selected Populations**

The area below the dashed line (Figure 1) displays certain vaccines recommended for use in selected populations. Highrisk children aged 24–59 months should receive catch-up pneumococcal conjugate vaccine (PCV) doses, if indicated (3). Pneumococcal polysaccharide vaccine (PPV) is recommended in addition to PCV for certain high-risk groups (3). The recommendation to administer annual influenza vaccine to high-risk children also appears on the schedule (4).

## **Vaccine Supply**

As a result of the vaccine supply shortage, deferral of some doses of tetanus and diphtheria toxoids (Td), diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP), and pneumococcal conjugate vaccine (PCV) has been recommended (5–7); health-care providers should record patients for whom vaccination has been deferred and should contact them once the supply has been restored.

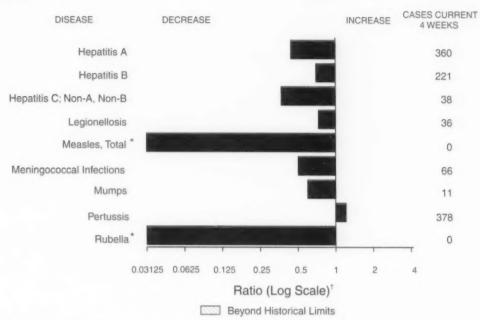
## **Vaccine Information Statements**

The National Childhood Vaccine Injury Act requires that all health-care providers give parents or patients copies of Vaccine Information Statements before administering each dose of the vaccines listed in the schedule. Additional information about Vaccine Information Statements is available from state health departments and at http://www.cdc.gov/nip/publications/VIS. Detailed recommendations for using vaccines are available from the manufacturers' package inserts, ACIP statements on specific vaccines, and the 2000 Red Book (2–4,8). ACIP statements for each recommended childhood vaccine can be viewed, downloaded, and printed from the CDC National Immunization Program at http://www.cdc.gov/nip/publications/ACIP-list.htm; instructions on the use of the Vaccine Information Statements are available at http://www.cdc.gov/nip/publications/VIS/vis-Instructions.pdf.

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FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending January 12, 2002, with historical data



\* No measles or rubella cases were reported for the current 4-week period yielding a ratio for week 2 of zero (0). † Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending January 12, 2002 (2nd Week)

		Cum. 2002	Cum. 2001		Cum. 2002	Cum. 2001
Anthrax		-	-	Encephalitis: West Nile*	3	-
Botulism:	foodborne		1 1	Hansen disease (leprosy)*		1
	infant	2	2	Hantavirus pulmonary syndrome*		-
	other (wound & unspecified)	-	- 1	Hemolytic uremic syndrome, postdiarrheal*	4	3
Brucellosis*		1	2	HIV infection, pediatric*†		*
Chancroid		1	4	Plague		
Cholera			- 1	Poliomyelitis, paralytic		-
Cyclosporiasi	s*	3	. 1	Psittacosis*		
Diphtheria				Q fever*	1	
Ehrlichiosis:	human granulocytic (HGE)*	2	2	Rabies, human		-
	human monocytic (HME)*	1	1 1	Streptococcal toxic-shock syndrome*		2
	other and unspecified		- 1	Tetanus		2
Encephalitis:	California serogroup viral*	3	1 1	Toxic-shock syndrome	3	7
	eastern equine*	-		Trichinosis		2
	Powassan*	-	- 1	Tularemia*	1	-
	St. Louis*	-		Yellow fever		-
	western equine*	-	-	10.00		

-: No reported cases.

\* Not notifiable in all states.

Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP). Last update December 25, 2001.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending January 12, 2002, and January 13, 2001 (2nd Week)

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N: Not notifiable. U: Unavailable. -: No reported cases.

\* Chlamydia refers to genital infections caused by *C. trachomatis.*\* Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update December 25, 2001.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending January 12, 2002, and January 13, 2001 (2nd Week)

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	Escher	richia coli						Age <5	vears
	Shiga Tox	cin Positive,	Ciaminaia	-			Ages,	Serot	уре
Reporting Area	Cum. 2002	Cum. 2001	Giardiasis Cum. 2002	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
JNITED STATES	2002	1	185	5,520	11.858	29	38	2002	2001
	-					23			
NEW ENGLAND Maine			13	190	158		1		
N.H.			1	4	3		-	-	
/t.			3	2	8		*		
Mass.			1	155	36		1	-	
R.I. Conn.			2	28	27 84				
				440					
VID. ATLANTIC Upstate N.Y.	1	-	16	442 22	936 47	8 5	8		
N.Y. City			3	258	347	2	2		
N.J.	*	*			165		6	-	
Pa.			9	162	377	1			
E.N. CENTRAL	-		35	887	2,333	7	9		
Ohio			14	62	837	7	3		
Ind.		*	5	84 305	236	-	4		*
III. Mich.			13	404	789 240		4		
Wis.		*	3	32	231		1		
W.N. CENTRAL			25	55	548		1		
Minn.			-	30	118	-	1		
Iowa		-	7		5	-			
Mo.	*	*	11	15	264	-	1	2	
N. Dak. S. Dak.		*	1	10	10	-	7	*	*
Nebr.				.0	34				
Kans.			6		117	-			
S. ATLANTIC	-		45	1,231	3,305	8	13		
Del.		-	4		57			-	
Md.	-		3	107	331	-	*	*	
D.C. Va.	*	*	4	92 302	119 202		*	*	
W. Va.				26	12	-			
N.C.			*	209	476	1	5		
S.C.			*	*	1,214	-		*	-
Ga.			34	3 492	392 502	7	6 2	*	-
Fla.									
E.S. CENTRAL	-	1	5	1,015	1,201	*	1	-	
Ky. Tenn.		1	-	99 384	112 382	-	-	,	
Ala.			5	349	423		1	-	-
Miss.			*	183	284	*	*	*	+
W.S. CENTRAL			-	1,361	2,136	-	*	-	-
Ark.		*			245				
La. Okla.				340 144	460 164				
Tex.				877	1,267			-	
MOUNTAIN			17		453	1	4		
Mont.		-	17	154 5	403		4		
Idaho	*	-	1	1	4	-	-		
Wyo.		-		*	3		-	*	
Colo.	-	*	14	58 25	213	1	2 2	*	
N. Mex. Ariz.			1	57	56 107		-		-
Utah				8	1	~		*	
Nev.			-		68		*		
PACIFIC			29	185	788	5	1		
Wash.		-	*	118	91	*		*	-
Oreg.			25	-	43	3		*	
Calif. Alaska			1	50 12	625 9	-	1		
Hawaii			3	5	20	2	*		
Guam			-						
P.R.	2				20	-	-		
V.I.			-						
Amer. Samoa	U	U	U	U	U	U	U	U	U

N: Not notifiable.

U: Unavailable.

-: No reported cases.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending January 12, 2002, and January 13, 2001 (2nd Week)

	Ha	emophilus in	fluenzae, Inva-	sive						
			5 years		1		Hepatitis	(Viral, Acute).	by Type	
	Non-Se	rotype B	Unknown	Serotype	A		E		C; Non-A	Non-B
	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.
leporting Area	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001
NITED STATES		13	1	1	116	407	42	133	12	214
EW ENGLAND		1			5	17		3		2
faine			-		1		*	-	-	-
l.H.	*			*	~	1	*			
t.		1		*	1	10		~	-	
fass.	1	,	-		1	10		-	-	2
ionn.					3	6		3	-	
IID. ATLANTIC		1			9	49	3	40		84
pstate N.Y.		-		-	-	4	1			
Y. City	*	1	-	-	2	19		13		
J.	*	1			7	25		25		84
a.					7	1	2	2		
N. CENTRAL	4	1	*	*	11	131	16	14	2	14
hio id.			-		5	6	5	4	1	-
u.		1		1	1	97	- 1	*		8
lich.	-	-		-	5	25	11	10	1	6
Vis.		*				3	*	-		-
V.N. CENTRAL					13	21	2	11	6	50
tinn.	+				1.0	-	*		-	
owa.					5		1		-	
fo. I. Dak.	*	*		-		8		9	6	50
Dak.					1	-		1	-	
lebr.			-			11		1		
ans.		-			7	2	1			
ATLANTIC		2			55	25	16	12	1	
lel.		*	-					-	1	
1d.		-			6	10	1	4	-	
a.		*	*	-	4	1	1	*		
v. Va.		-		-		-	-			
I.C.					14		3	6	*	_
S.C.		-	*		-	*	~			
ia.		2			31	14	11	2	-	
la.			-	-	*	*	-	-		
S. CENTRAL					1	6	*	7		4
ly. enn.		*	*			1	-	1	*	:
ila.						4		1	0	1
Miss.		+			1			4		3
V.S. CENTRAL					2	96	2	8		58
krk.		~			1	2	1	1		
a.		~	-	-		6	-	7	-	12
Okla. ex.		*		*		-	-		~	
			*	-	1	88	1		*	46
MOUNTAIN		1	1	1	4	15	1	8	1	
Mont. daho	-	-			1	2	*	1		
Vyo.								,		
Colo.	*			4	2	10	-	5	1	, i
I. Mex.	4	1	1	1	1	1	1	2	*	
Ariz. Jtah	*			-	*	:	-	~	*	
lev.	1	-				1	*			
ACIFIC		-					-	-		
Vash.		/			16	47	2	30	2	2
Orea.					9		2	1	2	*
alif.		6			9 7	43	-	27	-	2
laska			4	-		4		1		-
ławaii		1	*					1		
Buam	+	-	~		*					
P.R. (.).					*	-		1	*	
Amer, Samoa	Ü	ú	ū	Ü	ú	Ű		11	11	11
C.N.M.I.		U	U	U	U	U	U 4	U	U	U

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending January 12, 2002, and January 13, 2001 (2nd Week)

	Legion	nellosis	Lister	iosis	Lyme Dise	ease	Malar	ria	Meas	
Reporting Area	Cum. 2002	Cum. 2001								
NITED STATES	10	16	1	12	62	75	7	24	*	6
EW ENGLAND		1		2		6	1	1		
aine	-		2	-	-		-		-	
.Н.	*	2	*	*		-	1			
ass.		1	-	2		6		1		
.1.	*			-	-				-	
onn.	+	-		-	-		*		-	
ID. ATLANTIC	1	2	2	1	39	32		4	-	
pstate N.Y.	-		,	1	28	1	*	*	7	-
.Y. City	-	2			-	1 26		4		
a.	1	-			11	4	-			-
N. CENTRAL	7	7		3	2	10		3		
hio	3	4	-	-	2	4		1	-	-
id.	*	-	*		*					-
I. lich.	4	1		1	*	2	-	2		
vis.	4	1	1	1	U	4	-			- 2
V.N. CENTRAL		1		1	1		2	1		
Minn.	-					,	6	1		
owa		-					1		-	
No.		4		-	1		1	1		
l. Dak. J. Dak.	-	-	-							
lebr.	-	1							-	-
(ans.	-	-		1		-	*	-	4.	-
. ATLANTIC	2	1		+	19	17	3	4	-	
Del.	1	-				1			*	-
Md. D.C.	1	1			19	15	1	3		-
la.	-	-		-		1	-	,		
V. Va.	N	N		-			-		-	
V.C.		*		-	-		1			-
S.C. Ga.	-	-	1				-			
Fla.	-		- 0	12	1	-				
E.S. CENTRAL		1						16		
Ky.	-	-							,	
Tenn.	-		-	-	-		+		-	
Ala. Miss.		1			1					
								1		
W.S. CENTRAL Ark.		1	1		1	6		1		
La.	-	1		-		-	*	1	-	
Okla.	-	-	-	-	7					
Tex.			*	-	1	6	-	*	*	
MOUNTAIN	*	1	1			*	*	1	-	
Mont. Idaho		-	_	1	1	1		-		
Wyo.			2			-				
Colo.		1	1	*	*	*	-	1	+	
N. Mex.			-	-						
Ariz. Jtah				-		-		-		
Nev.	+			-	4	-		-	-	
PACIFIC		1		5		4	1	9	-	6
Nash.				-		-	-			5
Oreg.	N	N	-	-	*	4	1	1	7	
Calif. Alaska		1		5		4	1	8		
Hawaii				-	N	N			-	1
Guam	_				-		-			
P.R.					N	N		~	-	
V.I.							ů	Û	Ú	Ü
Amer. Samoa	U	U	U	U	U	U	U	U	U	L

N: Not notifiable.

U: Unavailable.

-: No reported cases.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending January 12, 2002, and January 13, 2001 (2nd Week)

	Menin	gococcal isease	Mun	nos	Per	rtussis	Rabies, A	nimal
Reporting Area	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum 2001
UNITED STATES	26	103	2	5	56	105	52	230
NEW ENGLAND	1	7	-		25	38	7	17
Maine						*	*	3
N.H. Vt.	1				10	9	2	6
Mass.		5			15	29	1	5
R.I.		,			*	*	1	1
Conn.		2	-				3	2
MID. ATLANTIC Upstate N.Y.	1	15	-			2	16 14	16 13
N.Y. City		4				1	14	13
N.J.		8	*	-	-			3
Pa.			-			-	2	*
E.N. CENTRAL	9	11	1	9	6	12	1	2
Ohio Ind.	8	3			5	3	1	
III.		3						
Mich.	1	3 2	1		1	2		
Wis.						7	*	2
W.N. CENTRAL	2	5		-	6	7	2	9
Minn. Iowa		2	*					9 3 3
Mo.	1	3			2	1 4	2	1
N. Dak.		-						
S. Dak.	1			19.1		-	*	2
Nebr. Kans.		-	1		*			*
		-	-			2		
S. ATLANTIC Del.	5	8			1	2	17	32
Md.		4	-			2		5
D.C.						-		
Va. W. Va.		-					4	4
N.C.	1	2	1				3 10	2 5
S.C.	-	-					10	
Ga.	4	1	*					15
Fla		1		-		*	-	1
E.S. CENTRAL		4		-	2	2	2	106
Ky. Tenn.		1		*	1	1	1	106
Ala.		3					1	100
Miss.		*	7		*	1		
W.S. CENTRAL	3	31	2				3	24
Ark.	1			*				
La. Okla.	1	4			7		3	
Tex.	1	26		1	~		3	21
MOUNTAIN	1	5			15	26	4	11
Mont.	1		-		10	20	**	1
Idaho Wyo.	*	2	*		4	3	.40	+
Colo.	1	1		-	8	23		3
N. Mex.		1			3	23		*
Ariz.			*				4	7
Utah Nev.		1	*	*				*
				*			*	
PACIFIC Wash.	4	17	1	5	1	16	~	13
Oreg.	4	1.	N	N		í		
Calif.		14	1	4		12		7
Alaska Hawaii		-			1	*	*	6
		2		1		3	*	-
Guam P.R.		*	~	*		*	-	
V.I.		-	-	-	-			2
Amer. Samoa	U	U	U	U	U	U	Ü	Ü
C.N.M.I.		U		U		Ü		Ü

N: Not notifiable.

U: Unavailable

- : No reported cases.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending January 12, 2002, and January 13, 2001 (2nd Week)

	Rocky Mountain spotted fever			Ru	bella			
			Ru	bella	Conge Rub		Salmone	llosis
Reporting Area	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
NITED STATES	8	2		-	1 2002	2001	252	715
EW ENGLAND		-					25	44
aine							3	3
H.							1	
	*	*	*		*		1	2
lass.			-	*	*		18	37
.I. onn.							2	2
IID. ATLANTIC pstate N.Y.	1	1					21	107 5
I.Y. City		-	-				-	26
I.J.					*		*	55
a.	1	-		*	*	*	18	21
.N. CENTRAL	1	1		+			53	134
Dhio	1	*	-	*	*	*	27	43
d.	*	1	*			*	6	54
I. Nich.		1					19	14
Vis.								23
V.N. CENTRAL							48	38
linn.							4	10
iwa	*						10	2
lo.	*				*	*	27	14
Dak.	4						2	4
ebr.		7					4	3
lans.			-				5	5
ATLANTIC	6	1					36	111
Del.							30	1
ld.	1	1					4	12
D.C.			*		-		1	
'a. V. Va.	*				*		*	
.C.	5						27	22
i.C.	-							-
àa.	*				÷		4	63
Fla.				*	*		*	13
S. CENTRAL	9						24	37
ζy.					*			3
enn. Na.	*				*		22	19
Miss.				-			1	12
V.S. CENTRAL							5	108
Ark.				-			2	100
La.						-	-	12
Okla.			-	*	*		1	
Tex.		*	*	*			2	88
MOUNTAIN			-				20	25
Mont.	*		-		*			2
daho			*				5	2
Nyo. Colo.						*	15	13
N. Mex.								(
Ariz.		-		*	*	10		
Utah	*	*	*	*	*		-	
Nev.	-	*	-	-	*	*		
PACIFIC	*	*	-	*		*	20	11
Wash.	*		-		*	*	11	
Oreg. Calif.							6	105
Alaska					*		1	
Hawaii			*				2	(
Guam								
P.R.							-	3
V.I.		*						
Amer. Samoa C.N.M.I.	U	U	U	U	U	U	U	(

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending January 12, 2002, and January 13, 2001 (2nd Week)

	Shig	ellosis	Streptococc Invasive,	Group A	Invasive	s pneumoniae, (<5 years)	Streptococcus Drug Resistar	
Reporting Area	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	2001
UNITED STATES	167	416	72	123	6	1	40	42
NEW ENGLAND	7	5	4	4	4			1
faine			2	1	-	~	*	
I.H. T.	*	7	1	1	4	*	-	1
lass.	6	5		2	4			1
3.1.	-	-	-	*		-		-
Conn.	1	-	-	-	*	*	-	-
MID. ATLANTIC	3	52	5	33	2	1	2	2
Jpstate N.Y.	1	28	3	3		1	2	2
I.Y. City I.J.		14	1	18 12	1	*		*
a.	2	4	1	12				-
E.N. CENTRAL	29	56	14	30	1		1	
Ohio	23	9	7	4				
nd.	-				1	-	1	2
II. Mich.	4 2	25	7	6	*	-	*	-
Vis.	2	18	1	18				
V.N. CENTRAL	57	62	2	7				
Minn.	9	29	2	/			5	*
owa	5	-						-
Ao.	4	22	1	3				-
V. Dak. S. Dak.	26	1	*				*	-
Nebr.	36	2		1	1		*	*
Cans.	3	8	1	3		*	5	
S. ATLANTIC	33	34	31	8	1		30	26
Del.	2	-	-	-			30	20
Md.	2	3	2	1				-
D.C. /a.	3		1		1	*	*	*
W. Va.				1				*
V.C.	9	16	5	2				
S.C.	40			2	*	*		
Ga. Fla.	19	12	23	3 2			30	17
E.S. CENTRAL	47				-			9
Ky.	17	29 12		2	*			2
Tenn.		12		2				1
Ala.	15	7	-	-				
Miss.	1	10	*					
W.S. CENTRAL	5	84	1	16				10
Ark. .a.	3	3	*	-		*		1
Okla.	1	7		2	*		-	9
Tex.	1	74	1	14				
MOUNTAIN	5	13	13	18			2	1
Mont.	-		-	,,,			-	
daho	*	-	*	*				
Myo. Colo.	4	4	8	14		+	*	*
N. Mex.	1	9	5	4			2	1
Ariz.							-	
Utah Nev.	*	*	*			-		*
	*		-			*		×
PACIFIC Wash.	11	81	2	5		-		
Oreg.	4					-	*	-
Calif	7	81	2	5				2
Alaska		*	-	-				*
Hawaii	-		*			*		
Guam								
P.R.								
Amer, Samoa	ű	U	Ü	Ü	ú	Ü	*	
C.N.M.I.		Ü	U	Ü	U	Ü		*

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending January 12, 2002, and January 13, 2001 (2nd Week)

Reporting Area UNITED STATES	Primary & Cum.	Secondary	Conge	onital*	Tubero	rulosis	fever	
	Cum							
	2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum 2001
MILED STATES	85	137	*	20	47	141	2	3
NEW ENGLAND		2	~		5	1	1	
Maine	*						4	
V.H.	*		-			1		
Mass.	-	-	-	*			1	
R.I.	-		*					
Conn.	-	2	*	*	5		-	
MID. ATLANTIC	3	9		2	11	1		
Upstate N.Y. N.Y. City	2	5				1		
N.J.	-	2		1				
Pa.	1	2			11			
E.N. CENTRAL	5	18		1	2	5	1	
Ohio Ind.	2	3 4			1	4	-	
11.	2	11		1	1	-		
Mich.	*	*	*		*	*	1	
Wis.	*		*			*		
W.N. CENTRAL	*	3			18	1	*	1
Minn. Iowa		2				1		
Mo.		1	*		18			1
N. Dak.		*	*		-			
S. Dak, Nebr.								
Kans.								
S. ATLANTIC	23	53		8	1	12		,
Del.		*	*		-	-		
Md. D.C.	3	8		1	*	3		
Va.	2	3				3		
W. Va.						1		
N.C.	10	14	*	2	1			
S.C. Ga.	3	6 11		2 2		6		
Fla.	5	11		3				
E.S. CENTRAL	20	16			3	5		
Ky.	1	2		*			*	
Tenn. Ala.	10	6			3	5		
Miss.	1	5			3	5		
W.S. CENTRAL	18	18		3		58		
Ark.		3	*	2		6		
La.	5	4			*		*	
Okla. Tex.	3 10	10		1		52	-	
MOUNTAIN	13	2		1		6		
Mont.	13	2		1		0		
Idaho	1			-		-	*	
Wyo. Colo.		*		*	*	*		
N. Mex.	3		2			2		
Ariz.	9	1	1	1		1		
Utah	*	1		*				
Nev.						3		
PACIFIC Wash.	3	16 2	*	5	7	52 7		
Oreg.		1			-	*		
Calif.	2	12	7	5	~	39	*	
Alaska	*	1	*	*	1 2	1 5	*	
Hawaii		1			6	J		
Guam P.R.		20					*	
V.I.						*		
Amer. Samoa C.N.M.I.	U	U	U	U	U 2	U	U	(

N: Not notifiable. U: Unavailable. - ; No reported cases. \*Updated from reports to the Division of STD Prevention, NCHSTP.

			es,* wed Causes,		(Years)					All	Causes,	By Age (	Years)		
Reporting Area	All Ages	>65	45-64	25-44	1-24	<1	P&I <sup>1</sup> Total	Reporting Area	All Ages	>65	45-64	25-44	1-24	<1	P&I Tota
NEW ENGLAND	657	473	126	33	15	10	61	S. ATLANTIC	1.465	954	332	120	37	22	72
Boston, Mass.	184	133	35	8	5	3	18	Atlanta, Ga.	187	109	45	25	5	3	5
Bridgeport, Conn.	38	29	8		1	-	3	Baltimore, Md.	138	64	61	7	4	2	7
Cambridge, Mass.	18	15	1	2		*	3	Charlotte, N.C.	147	102	24	15	4	2	13
Fall River, Mass.	31	25	5			1	3	Jacksonville, Fla.	215	141	47	15	7	5	7
Hartford, Conn.	42	21	17	3		1	3	Miami, Fla.	106	64	20	16	5	1	4
Lowell, Mass.	25	19	4	2		-	3	Norfolk, Va.	73	48	15	6	2	2	5
Lynn, Mass.	11	6	5	*	-	-	1	Richmond, Va.	102	69	18	14	-	1	8
New Bedford, Mass.	26	20	4	2		*	1	Savannah, Ga.	37	30	6	1	*	*	-
New Haven, Conn.	38	25	8	1	2	2	5	St. Petersburg, Fla.	73	56	12	1	2	2	6
Providence, R.I.	62	43	10	5	4		1	Tampa, Fla.	274	206	47	13	4	4	16
Somerville, Mass.	6	4	1	1	~	-	5	Washington, D.C.	101	63	27	7	4	-	1
Springfield, Mass.	55	42	9	1	-	3	8	Wilmington, Del.	12	2	10	-	-		*
Waterbury, Conn.	52	38	8	3	3		2	E.S. CENTRAL	1.010	688	216	59	31	16	87
Worcester, Mass.	69	53	11	5	-	*	10	Birmingham, Ala.	236	160	46	13	10	7	21
MID. ATLANTIC	2.637	1.874	511	168	44	40	179	Chattanooga, Tenn.	76	53	15	6	1	1	7
Albany, N.Y.	53	38	9	4	1	1	4	Knoxville, Tenn.	116	86	24	4		2	5
Allentown, Pa.	15	12	2	1	-		-	Lexington, Ky.	61	41	13	4	3	-	3
Buffalo, N.Y.	113	80	23	7	2	1	14	Memphis, Tenn.	169	107	42	13	5	2	17
Camden, N.J.	44	28	11	3	1	1	6	Mobile, Ala.	87	61	20	3	3		7
Elizabeth, N.J.	24	16	6	1	1	+		Montgomery, Ala.	60	42	15	2	1	+	10
Erie, Pa.§	54	40	12	2	-	-	3	Nashville, Tenn.	205	138	41	14	8	4	17
Jersey City, N.J.	69	41	14	8	2	4		W.S. CENTRAL	1.298	872	276	95	22	33	91
New York City, N.Y.	1,468	1,046	282	96	27	17	81	Austin, Tex.	79	47	20	9	66	3	5
Newark, N.J.	U	U	U	U	U	U	U	Baton Rouge, La.	104	79	16	8		1	5
Paterson, N.J.	24	17	5	2	-	-	2	Corpus Christi, Tex.	73	54	10	4	2	3	8
Philadelphia, Pa.	291	192	76	15	5	3	24	Dallas, Tex.	267	159	71	21	6	10	18
Pittsburgh, Pa.§	45	32	8	1		4	2	El Paso, Tex.	51	33	15	3	0	10	1
Reading, Pa.	26	22	1	3	+	*	2	Ft. Worth, Tex.	134	91	30	8	1	4	12
Rochester, N.Y.	154	121	21	9	2	1	15	Houston, Tex.	U	U	U	U	Ú	U	Ü
Schenectady, N.Y.	34	23	7	3		1	3	Little Rock, Ark.	87	60	17	8	2		2
Scranton, Pa.§	35	29	6		-		3	New Orleans, La.	U	U	U	U	Ü	U	Ü
Syracuse, N.Y.	88	69	12	3	2	2	10	San Antonio, Tex.	300	203	60	23	9	5	13
Trenton, N.J.	80	50	14	10	1	5	9	Shreveport, La,	57	35	15	2	1	4	11
Utica, N.Y. Yonkers, N.Y.	20 U	18 U	2	U	Ü	U	1 U	Tulsa, Okla.	146	111	22	9	1	3	16
								MOUNTAIN	1.214	822	227	104	33	23	88
E.N. CENTRAL	2,130	1,550	403	108	43	26	146	Albuquerque, N.M.	154	101	31	14	7	1	6
Akron, Ohio	75	56	15	2	1	1	13	Boise, Idaho	19	15	1	2		1	1
Canton, Ohio	47	36	7	2	1	1	7	Colo. Springs, Colo.	61	40	13	4	2	2	1
Chicago, III.	U	U	U	U	U	U	U	Denver, Colo.	106	55	28	14	1	8	12
Cincinnati, Ohio	79	55	14	7	3	-	9	Las Vegas, Nev.	276	202	49	19	6	-	22
Cleveland, Ohio	182	120	47 46	8	5	2	8	Ogden, Utah	32	24	7		1		3
Columbus, Ohio Dayton, Ohio	228 142	168	17	6	6	4	14 12	Phoenix, Ariz.	180	114	27	25	5	4	7
Detroit, Mich.	220	135	61	19	3	2	12	Pueblo, Colo.	38	32	4	*	2	-	5
Evansville, Ind.	53	39	12	19	1	2	5	Salt Lake City, Utah	143	94	29	12	4	4	17
Fort Wayne, Ind.	83	62	16	2	3		4	Tucson, Ariz.	205	145	38	14	5	3	14
Gary, Ind.	22	9	8	2	3		1	PACIFIC	1.745	1,261	301	129	31	23	124
Grand Rapids, Mich.	74	56	9	8	1		4	Berkeley, Calif.	21	13	7	12.0	31	1	1
Indianapolis, Ind.	286	207	54	12	8	5	9	Fresno, Calif.	128	83	33	9	3		3
Lansing, Mich.	59	41	11	7			6	Glendale, Calif.	18	13	1	2	2		9
Milwaukee, Wis.	182	123	38	14	2	5	14	Honolulu, Hawaii	88	73	11	4	-		6
Peoria, III.	63	49	11	2	1	-	6	Long Beach, Calif.	78	52	18	6	2		7
Rockford, III.	57	39	14	2	1	1	4	Los Angeles, Calif.	374	274	53	29	12	6	25
South Bend, Ind.	58	52	4	2		-	11	Pasadena, Calif.	23	14	6	2		1	5
Toledo, Ohio	140	120	11	8	~	1	6	Portland, Oreg.	144	96	25	15	4	4	5
Youngstown, Ohio	80	70	8	-	2		1	Sacramento, Calif.	U	U	U	U	U	Ü	U
W.N. CENTRAL	796	571	142	57		***		San Diego, Calif.	246	188	37	15		6	20
	796 65				16	10	57	San Francisco, Calif.		U	U	U	U	Ŭ	U
Des Moines, Iowa	0.0	46	10	5	2	2	10	San Jose, Calif.	235	180	37	14	2	2	23
Duluth, Minn.	15 34	14		-	7		1	Santa Cruz, Calif.	44	33	5	4	1	1	2
Kansas City, Kans. Kansas City, Mo.	82	24 57	5 17	5	2	×	4	Seattle, Wash.	159	111	29	14	4	1	14
Lincoln, Nebr.	72			6		1	3	Spokane, Wash.	72	56	11	5			7
	188	52	14	2	3		4	Tacoma, Wash.	115	75	28	10	1	1	6
Minneapolis, Minn.	188	136	28 14	18	3	3	10								
Omaha, Nebr. St. Louis, Mo.	60	73 37	20	1	3	1	9	TOTAL	12,952	9.065	2,534	873	272	203	905
St. Paul, Minn.	93	73	13	7	1	- 8	6								
Wichita, Kans.	89	59	20	6	2	2	10								

U: Unavailable. -:No reported cases.

\* Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of ≥100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

Pneumonia and influenza.

Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

Total includes unknown ages.

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